STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY GRAY DAVIS, Governor
DEPARTMENT OF TRANSPORTATION
ESC/OE MS #43
P.O. Box 942874
SACRAMENTO, CA 94274-0001

June 21, 1999

04-SF-80-5.8/7.6
04-043554

Addendum No. 1

Dear Contractor:

This addendum is being issued to the contract for construction on State highway in THE CITY AND COUNTY OF SAN FRANCISCO AT SAN FRANCISCO-OAKLAND BAY BRIDGE FROM 0.2 MILE EAST OF SAN FRANCISCO ANCHORAGE TO YERBA BUENA ANCHORAGE.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on July 13, 1999.

This addendum is being issued to revise the Project Plans and the Notice to Contractors and Special Provisions.

Project Plan Sheets 1, 4, 139, 140, 187 and 189 are revised. Half-sized copies of the revised sheets are attached for substitution for the like-numbered sheets.

In the Special Provisions, Section 2-1.08, "Escrow of Bid Documentation", is added as attached.

In the Special Provisions, Section 5-1.00, "Plans and Working Drawings", the first paragraph is revised as follows:

"When the specifications require working drawings to be submitted to the Office of Structure Design, the drawings shall be submitted to: Project 16 Resident Engineer, 280 Beale Street, San Francisco, CA 94105 (P.O. Box 191120, San Francisco, CA 94119-1120)."

In the Special Provisions, Section 5-1.21, "Sound Control Requirements", the second paragraph is revised as follows:

"Attention is directed to Section 12-1.17, 'Regulatory Requirements,' elsewhere in these special provisions for additional sound control requirements related to the new Pump Plant Station."

In the Special Provisions, Section 5-1.22, "Hazardous Material, General", the third paragraph is revised as follows:

"No Stockpiling of contaminated materials or hazardous materials will be allowed. Hazardous materials shall be transferred directly from the excavation to a registered transport vehicle, or a storage container approved for transport of hazardous waste by the United States Department of Transportation."

In the Special Provisions, Section 5-1.22, "Hazardous Material, General", the fourth paragraph is deleted.

In the Special Provisions, Section 10-1.01, "Order of Work", the second paragraph is revised as follows:

> "Attention is directed to "Maintaining Traffic", "Temporary Pavement Delineation", "Archaeological Sensitive Area", Section 12-1.01, "Scope", Section 12-1.28, "Time Allowed For Completion" and Section 12-1.29, " "Liquidated Damages" of these special provisions and to the stage construction sheets of the plans."

In the Special Provisions, Section 10-1.03, "Water Pollution Control", subsection "Storm Water Pollution Prevention Plan Preparation, Approval and Updates", the third sentence of the seventh paragraph is revised as follows:

"When minimum requirements are listed for any category, the Contractor shall incorporate into the SWPPP, and implement on the project, the listed minimum controls required in order to meet the pollution control objectives for the category."

In the Special Provisions, Section 10-1.03, "Water Pollution Control", subsection "Storm Water Pollution Prevention Plan Preparation, Approval and Updates", the second sentence of the eleventh paragraph is revised as follows:

"If the project is in non-compliance at any time, the Contractor shall submit a written report to the Engineer within 48 hours of identification of non-compliance."

In the Special Provisions, Section 10-1.03, "Water Pollution Control", subsection "Storm Water Pollution Prevention Plan Preparation, Approval and Updates", the following is added to the eleventh paragraph:

"The report shall specify the time and nature of the non-compliance and include a course of action to correct the deficiency. Non-compliance shall include, but not be limited to, any of the following conditions:

1. Any written notices, violations, or orders presented by a regulatory agency.
2. Control measures in the field are not implemented or maintained as provided for in the approved Storm Water Pollution Prevention Plan and amendments.
3. The contractor fails respond to written requests for corrective actions.
4. The contractor refuses to submit an annual certification.
5. Contractor discharges unauthorized materials, residues, or liquids to drainage conveyances or water bodies."

In the Special Provisions, Section 10-1.03, "Water Pollution Control", subsection "Storm Water Pollution Prevention Plan Preparation, Approval and Updates", the following is after to the eleventh paragraph:

"If the project is in non-compliance, the Engineer may impose one or more of the following actions:

1. Directing the Contractor to revise the operations and water pollution control program and SWPPP.
2. No further work on any contract item out of compliance until the water pollution control measures are adequate and the water pollution control program amended and acceptable to the Engineer.

3. No further work or the beginning of any new work on any contract items until an inspection is conducted through the work area to determine the adequacy of measures deployed to address all other work.
4. Notification to the Regional Water Quality Control Board (RWQCB) of the non-compliance status."

In the Special Provisions, Section 10-1.03, "Water Pollution Control", subsection "Payment", the fourth paragraph is revised as follows:

"Changes in control measures required by an approved amendment to the SWPPP, except changes to those control measures shown on the project plans and for which there is a contract item of work, shall be considered as included in the lump sum bid for the various items of work and no additional compensation will be allowed thereafter except changes to control measures required as a result of extra work will be compensated in accordance with Section 4-1.03D of the standard specifications and the following:

If the control measure is listed in the approved SWPPP schedule of values, an adjustment in compensation for the contract item for water pollution control will be made by applying the increase or decrease in quantities to the approved schedule of values. No adjustment of compensation will be made to the unit price listed for any item in the schedule of values due to any increase or decrease in the quantities, regardless of the reason for the increase or decrease. The provisions in Section 4-1.03B, "Increased or Decreased Quantities," shall not apply to items listed in the schedule of values.

If the control measure is not listed in the approved SWPPP schedule of values, payment will be made by force account.

In the Special Provisions, Section 10-1.09, "Progress Schedule (Critical Path) is revised as attached.

In the Special Provisions, Section 10-1.14, "Maintaining Traffic", subsection "Denial of Previously Prequested or Approved Lane Closures", under title "TerminatedClosures", the first sentence of the tenth paragraph is revised as follows:

"During the installation of the cross bracing between bents A and B (Location 1 and 3), Main Street shall be closed to both vehicular and pedestrian traffic, as shown on the plans, for a maximum period of 7 consecutive days."

In the Special Provisions, Section 10-1.23, "Earthwork", subsection "Hazardous Material Excavation", the Preliminary Site Investigation Summary Table is revised as attached.

In the Special Provisions, Section 10-1.34, "Furnish Seismic Isolation Bearing", subsection "Working Drawings Submittal", the first sentence of the first paragraph is revised as follows:

"The Contractor shall submit complete working drawings for the bearings to the Project 16 Resident Engineer, 280 Beale Street, San Francisco, CA 94105 (P.O. Box 191120, San Francisco, CA 94119-1120) in accordance with the provisions in Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications."

In the Special Provisions, Section 10-1.35, "Install Seismic Isolation Bearing", subsection "Working Drawings Submittal", the first sentence of the first paragraph is revised as follows:

"The Contractor shall submit complete working drawings for the bearing installation, including any required calculation sheets, to the Project 16 Resident Engineer, 280 Beale Street, San Francisco, CA 94105 (P.O. Box 191120, San Francisco, CA 94119-1120) in accordance with the provisions in Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications."

In the Special Provisions, Section 10-1.41, "Clean and Paint Structural Steel" subsection "Measurement and Payment" the second paragraph is revised as follows:

> "The contract price paid per square foot for spot blast clean and paint undercoat shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in dry spot blast cleaning and painting undercoat on the existing surfaces complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer."

In the Special Provisions, Section 12-1. "General Requirements", subsection "1.3 Use of Data", under "State-Furnished Materials", the fourth paragraph is revised as follows:

> "The Contractor shall notify the Engineer, not less than 48 hours before any material is to be picked up, giving the Engineer a requisition itemizing such materials, the time it will be picked up, and the Contract No. of this project. No materials will be issued to the Contractor without the requisition signed by the Engineer."

In the Special Provisions, Section 12-1.01, "Scope", the following sentence is added after the first paragraph

"Attention is directed to Section 10-1.01, 'Order of Work,' elsewhere in these special provisions."

In the Special Provisions, Section 12-1.01, "Scope", the third paragraph is revised as follows:

"Contractor shall obtain and pay for all City of San Francisco permits (excluding Building Permit) as required by the City and County of San Francisco Department of Building Inspection, the Department of Public Works, Bureau Of Street Use and Mapping, San Francisco Fire Department and San Francisco Health Department. Permits are required for opening of City streets (see Section 12-1.31 Excavation Code Requirements) and discharge of groundwater into the sewer system.

In the Special Provisions, Section 12-1.01, "Scope", in the fourth paragraph, in the second constraint, the date of October 14th, 1999 is revised to October 10, 1999.

In the Special Provisions, Section 12-1.04, "Areas for Contractor's Use", the first paragraph is revised as follows:

"Attention is directed to Section 5-1.25, 'Areas for Contractor's Use,' elsewhere in these special provisions."

In the Special Provisions, Section 12-1.07, "Progress Schedule", the first paragraph is revised as follows:

"A progress schedule shall be submitted in duplicate for the building work in accordance with the requirements in Section 10-1.09, "Progress Schedule (Critical Path)," elsewhere in these special provisions."

In the Special Provisions, Section 12-1.08, "Schedule of Values", the third sentence of the third paragraph is revised as follows:

"Bond premium, temporary construction facilities and other such items will not be paid for under the various work items and shall be included in the site work bid item for the entire Contract."

In the Special Provisions, Section 12-1.13, "Temporary Utilities", the first paragraph is deleted.

In the Special Provisions, Section 12-1.14, "Sanitary Facilities", the first paragraph is deleted.

In the Special Provisions, Section 12-1.28, "Time Allowed for Completion", the following paragraph is added before the first paragraph:

"Attention is directed to Section 10-1.01, ‘Order of Work,’ and Section 12-1.01, ‘Scope,’ elsewhere in these Special Provisions.”

In the Special Provisions, Section 12-1.28, "Time Allowed for Completion", in the first paragraph the dated of October 14th, 1999 is revised to October 10, 1999.

In the Special Provisions, Section 12-1.29, "Liquidated Damages", in the first paragraph the dated of October 14th, 1999 is revised to October 10, 1999.

In the Special Provisions, Section 02080, "Pump Station Demolition, Hazardous Materials Procedures", subsection 1.3, "Submittals", the designation 2c is revised to 2a.

In the Special Provisions, Section 02080, "Pump Station Demolition, Hazardous Materials Procedures", subsection 3.6, "Waste Disposal and Manifesting Procedures", A. 2., is revised as follows:

"A "Waste Manifest" shall be provided and completed by the Contractor for disposal of hazardous waste. The transporter shall possess a valid EPA Generator I.D. number. The Contractor's Hazardous Materials Supervisor shall notify the State Representative at least 48 hours prior to the time that the Manifest is required to be signed by the State."

In the Special Provisions, Section 02090, "Pump Station Demolition: Hazardous and Materials Abatement and Control", subsection 3.2, "Preparation", B. 19. g. the second sentence is revised as follows:

"The wipe sample will be analyzed by the contractor by flame atomic absorption using NIST Standard 1578."

In the Special Provisions, Section 11060, "Valves", subsection 2.7, "Control Valves", A. 4., in the "Material Specification" table Class 150 Flange is revised to Class 250 Flange.

In the Special Provisions, Section 11060, "Valves", subsection 2.7, "Control Valves", B. 3., in the "Material Specification" table Class 150 Flange is revised to Class 250 Flange.

In the Special Provisions, Section 15003, "Contractor and City Furnished Ductile Iron Pipes, Fittings and Gate Valves", subsection 2.2, "Contractor-Furnished Materials", paragraph A. is revised as follows:

"A. Pipe and fittings

3-inch, 6-inch, 8-inch, 10-inch and 12-inch Aboveground Suction and Discharge: Ductile Iron Flanged Pipe with threaded Class 250 flanges, ANSI B16.1 and Class 250 B16.1 flanged fitting including gaskets, Class 53 and meeting the requirements of ANSI/AWWA C151/A21.51. Ductile iron flanged pipe and fittings shall be manufactured by U.S. Pipe, or equal."

In the Special Provisions, Section 15003, "Contractor and City Furnished Ductile Iron Pipes, Fittings and Gate Valves", subsection 2.2, "Contractor-Furnished Materials", B., the following sentence is added to B. "Gate and Control Valves":

"All valve flanges shall be Class 250 to match pipe and fitting flanges."

In the Special Provisions, Section 15003, "Contractor and City Furnished Ductile Iron Pipes, Fittings and Gate Valves", subsection 2.2, "Contractor-Furnished Materials", D. is revised as follows:

"D. Bolts

For Class 250 - 316 stainless steel, ASTM A312, Grade A
FF Flanges - hex head bolts & ASTM A563, Grade A hex head nuts

In the Special Provisions, Section 15480, "Diesel Fuel Supply and Engine Exhaust Systems", subsection 1.1, "Section Includes", B. is revised as follows:

"All related and incidental work, including obtaining permits from San Francisco Fire Department and Health Department for installation of underground fuel storage tank, all where and as shown on the plans and in accordance with these specifications."

To Proposal and Contract book holders:

- INDICATE RECEIPT OF THIS ADDENDUM BY FILLING IN THE NUMBER OF THIS ADDENDUM IN THE SPACE PROVIDED ON THE SIGNATURE PAGE OF THE PROPOSAL.

- Submit bids in the Proposal and Contract book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.

- Inform subcontractors and suppliers as necessary.

This office is sending this addendum by UPS overnight mail to Proposal and Contract book holders to ensure that each receives it.

If you are not a Proposal and Contract book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,

ORIGINAL SIGNED BY

NICK YAMBAO, Chief
Plans, Specifications &
Estimates Branch
Office of Office Engineer

Attachments

2-1.08 ESCROW OF BID DOCUMENTATION

Bid documentation shall consist of all documentary and calculated information generated by the Contractor in preparation of the bid. The bid documentation shall conform to the requirements in these special provisions, and shall be submitted to the Department and held in escrow for the duration of the contract.

In the resolution of disputes involving the project, the escrowed bid documents will be the only documents accepted from the Contractor regarding preparation of the bid.

In signing the proposal, the bidder certifies that the material submitted for escrow constitutes all the documentary information used in preparation of the bid and that he has personally examined the contents of the container and that they are complete.

The bidder shall include with the proposal, the identification of the bidder's representative authorized to present the bid documentation and the persons responsible for preparing the bidder's estimate.

Nothing in the bid documentation shall be construed to change or modify the terms or conditions of the contract.

Escrowed bid documentation will not be used for pre-award evaluation of the Contractor's anticipated methods of construction, nor to assess the Contractor's qualifications for performing the work.

Bid documentation shall clearly itemize the Contractor's estimated costs of performing the work. The documentation submitted shall be complete and so detailed as to allow for an in-depth analysis of the Contractor's estimate.

The bid documentation shall include, but not be limited to: quantity takeoffs; rate schedules for the direct costs and the time- and non-time-related indirect costs for labor (by craft), plant and equipment ownership and operation, permanent and expendable materials, insurance and subcontracted work; estimated construction schedules, including sequence and duration and development of production rates; quotations from subcontractors and suppliers; estimates of field and home office overhead; contingency and margin for each contract item of work; and other reports, calculations and information used by the bidder to arrive at the estimate submitted with the proposal.

The Contractor shall also submit bid documentation for each subcontractor whose total subcontract exceeds $250,000. Subcontractor bid documentation shall be enclosed with the Contractor's submittal. The examination of subcontractors' bid documentation will be accomplished in the same manner as for the Contractor's bid documentation. If a subcontractor is replaced, bid documentation for the new subcontractor shall be submitted for review and escrow before authorization for the substitution will be granted. Upon request of a subcontractor, the bid documentation from that subcontractor shall be reviewed only by the subcontractor and the Department.

If the bidder is a joint venture, the bid documentation shall include the joint venture agreement, the joint venture estimate comparison and final reconciliation of the joint venture estimate.

Copies of the proposals submitted by the first, second and third low bidders will be provided to the respective bidders for inclusion in the bid documentation to be escrowed.

The first, second, and third apparent low bidders shall present the bid documentation for escrow at the District 04 Office, 111 Grand Avenue, Room 12-816, Oakland, CA, on the first Monday, at 1:00 p.m.., following the time indicated in the "Notice to Contractors" for the opening of bids.

Bid documentation shall be submitted in a sealed container, clearly marked with the bidder's name, date of submittal, project contract number and the words, "Bid Documentation for Escrow."

Failure to submit the actual and complete bid documentation as specified herein within the time specified shall be cause for rejection of the proposal.

Upon submittal, the bid documentation of the apparent low bidder will be examined and inventoried by the duly designated representatives of the Contractor and the Department to ensure that the bid documentation is authentic, legible, and in accordance with the terms of this section "Escrow of Bid Documentation." The examination will not include review of, nor will it constitute approval of, proposed construction methods, estimating assumptions or interpretation of the contract. The examination will not alter any conditions or terms of the contract. The acceptance or rejection by the Department that the submitted bid documents are in compliance with this section "Escrow of Bid Documentation" shall be completed within 48 hours of the time the bid documentation is submitted by the Contractor.

At the completion of the examination, the bid documents will be sealed and jointly deposited at an agreed commercial bank.

Bid documentation submitted by the second and third apparent low bidders will be jointly deposited at agreed commercial banks. If the apparent low bid is withdrawn or rejected, the bid documentation of the second low bidder will be examined and inventoried in the manner specified above, then sealed and deposited again in escrow. If the second low bid is withdrawn or rejected, the bid documentation of the third low bidder will be examined and inventoried in the manner specified above, then sealed and deposited again in escrow. Upon execution and final approval of the contract or rejection of all bids, the bid documentation will be returned to any remaining unsuccessful bidders.

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The escrowed bid documentation may be examined by the designated representatives of both the Department and the Contractor, at any time deemed necessary by either the Department or the Contractor to assist in the negotiation of price adjustments and change orders, or in the settlement of claims or disputes.

If requested by a Disputes Review Board, the escrowed bid documentation may be utilized to assist the Board in its recommendations.

The bid documentation submitted by the Contractor will be held in escrow until the contract has been completed, the ultimate resolution of all disputes and claims has been achieved and receipt of final payment has been accepted by the Contractor. The escrowed bid documentation will then be released from escrow to the Contractor.

The bid documentation submitted by the bidder is, and shall remain, the property of the bidder, and is subject to only joint review by the Department and the bidder. The Department stipulates and expressly acknowledges that the submitted bid documentation constitutes trade secrets and will not be deemed public records. This acknowledgment is based on the Department's express understanding that the information contained in the bid documentation is not known outside the bidder's business, is known only to a limited extent and only by a limited number of employees of the bidder, is safeguarded while in the bidder's possession, is extremely valuable to the bidder and could be extremely valuable to the bidder's competitors by virtue of it reflecting the bidder's contemplated techniques of construction. The Department acknowledges that the bid documentation includes a compilation of information used in the bidder's business, intended to give the bidder an opportunity to obtain an advantage over competitors who do not know of or use the contents of the documentation. The Department agrees to safeguard the bid documentation, and all information contained therein, against disclosure, including disclosure of subcontractor bid documentation to the Contractor and other subcontractors to the fullest extent permitted by law. However, in the event of arbitration or litigation, the bid documentation shall be subject to discovery, and the Department assumes no responsibility for safeguarding the bid documentation unless the Contractor has obtained an appropriate protective order issued by the arbitrator or the court.

Full compensation for preparing the bid documentation, presenting it for escrow and reviewing it for escrow and upon request of the Engineer shall be considered as included in the contract prices paid for the various items of work, and no additional compensation will be allowed therefor.

The direct cost of depositing the bid documentation in escrow at the agreed commercial bank will be paid by the State.

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ADDED PER ADDENDUM NO. 1 DATED JUNE 21, 1999

10-1.09 PROGRESS SCHEDULE (CRITICAL PATH)

Progress schedules will be required for this contract. Progress schedules shall utilize the Critical Path Method (CPM).

Definitions - The following definitions apply to this section "Progress Schedule (Critical Path)":

1. Activity: Any task, or portion of a project, which takes time to complete.
2. Baseline Schedule: The initial CPM schedule representing the Contractor's original work plan, as accepted by the Engineer.
3. Controlling Operation: The activity considered at the time by the Engineer, within that series of activities defined as the critical path, which, if delayed or prolonged, will delay the time of completion of the contract.
4. Critical Path: The series of activities which determines the earliest completion of the project (Forecast completion Date). Those activities with float less than or equal to a specified value, often zero.
5. Critical Path Method: A mathematical calculation to determine the earliest completion of the project represented by a graphic representation of the sequence of activities that shows the interrelationships and interdependencies of the elements composing a project.
6. Current Contract Completion Date: The extended date for completion of the contract shown on the weekly statement of working days furnished by the Engineer in accordance with Section 8-1.06, "Time of Completion," of the Standard Specifications.
7. Early Completion Time: The difference in time between the current contract completion date and the Contractor's scheduled early forecast completion date as shown on the accepted baseline schedule, or schedule updates and revisions.
8. Float: The amount of time between the early start date and the late start date, or the early finish date and the late finish date, of any activity or group of activities in the network.
9. Forecast Completion Date: The completion date of the last scheduled work activity identified on the critical path.
10. Fragnet: A section or fragment of the network diagram comprised of a group of activities.
11. Free Float: The amount of time an activity can be delayed before affecting a subsequent activity.
12. Hammock Activity: An activity added to the network to span an existing group of activities for summarizing purposes.
13. Milestone: A marker in a network, which is typically used to mark a point in time or denote the beginning or end of a sequence of activities. A milestone has zero duration, but will otherwise function in the network as if it were an activity.
14. Revision: A change in the future portion of the schedule that modifies logic, adds or deletes activities, or alters activities, sequences, or durations.
15. Tabular Listing: A report showing schedule activities, their relationships, durations, scheduled and actual dates, and float.
16. Total Float: The amount of time that an activity may be delayed without affecting the total project duration of the critical path.
17. Update: The modification of the CPM progress schedule through a regular review to incorporate actual progress to date by activity, approved time adjustments, and projected completion dates.

Preconstruction Scheduling Conference - The Engineer will schedule and conduct a Preconstruction Scheduling Conference with the Contractor's Project Manager and Construction Scheduler within seven days after the bidder has received the contract for execution. At this meeting, the requirements of this section of the special provisions will be reviewed with the Contractor. The Contractor shall be prepared to discuss its schedule methodology, proposed sequence of operations, the activity identification system for labeling all work activities, and any deviations it proposes to make from the Stage Construction Plans. The Engineer shall submit a diskette of a scheduling shell project, displaying a generic activity code dictionary consisting of fields populated with the Caltrans Scope Breakdown Structure Code. The Contractor shall utilize these codes, and may add other codes as necessary, to group and organize the work activities. —Periodically the Engineer may request the Contractor to utilize additional filters, layouts or activity codes to be able to further group or summarize work activities.

Also, the Engineer and the Contractor shall review the requirements for all submittals applicable to the contract and discuss their respective preparation and review durations. All submittals are to be reflected on the Interim Baseline Schedule and the Baseline Schedule.

Interim Baseline Schedule - Within 15 days after approval of the contract, the Contractor shall submit to the Engineer an interim baseline project schedule which will serve as the progress schedule for the first 120 days of the project, or until the baseline schedule is accepted, whichever is sooner. The interim baseline schedule shall utilize the critical path method. The interim baseline schedule shall depict how the Contractor plans to perform the work for the first 120 days of the contract. Additionally, the interim baseline schedule shall show all submittals required early in the project, and shall provide for all permits, and other non-work activities necessary to begin the work. The interim baseline schedule submittal shall include a 3 l/2 inch floppy diskette which contains the data files used to generate the schedule.

The Engineer shall be allowed 10 days to review the schedule and to provide comments, including the Contractor's application of the supplied scope breakdown structure. The interim baseline schedule does not require Caltrans approval but all comments are to be implemented into the baseline schedule. Resubmittal of the interim baseline schedule is not required. Late review of the interim baseline schedule shall not restrain the submittal of the baseline schedule.

Baseline Schedule - Within 30 days after approval of the contract, the Contractor shall submit to the Engineer a baseline project schedule including the incorporation of all comments provided to the interim baseline schedule. The baseline project schedule shall have a data date of the day prior to the first working day of the contract and shall not include any completed work to-date. The baseline progress schedule shall meet interim target dates, milestones, stage construction requirements, internal time constraints, show logical sequence of activities, and must not extend beyond the number of days originally provided for in the contract.

The baseline CPM schedule submitted by the Contractor shall have a sufficient number of activities to assure adequate planning of the project and to permit monitoring and evaluation of progress and the analysis of time impacts. The baseline schedule shall depict how the Contractor plans to complete the whole work involved, and shall show all activities that define the critical path.

The baseline progress schedule shall be supplemented with resource allocations for every activity, to a level of detail that facilitates report generation based on labor craft and equipment class for the Contractor and subcontractors. The Contractor shall use average composite crews to display the labor loading of on-site construction activities. The Contractor shall optimize and level labor to reflect a reasonable plan for accomplishing the work of the contract and to assure that resources are not duplicated in concurrent activities. The Contractor shall require each subcontractor to submit in writing a statement certifying that the subcontractor has concurred with the Contractor's CPM, including major updates, and that the subcontractor's related schedule has been incorporated accurately, including the duration of activities and labor and equipment loading. Along with the baseline progress schedule, the Contractor shall also submit to the Engineer time-scaled resource histograms of the labor crafts and equipment classes to be utilized on the contract. The baseline schedule submittal shall include a 3 l/2 inch floppy diskette which contains the data files used to generate the schedule.

The Engineer shall be allowed 15 days to review and accept or reject the baseline project schedule submitted. Rejected schedules shall be resubmitted to the Engineer within 5 days at which time a new 15 day review period by the Engineer will begin.

Project Schedule Reports - Schedules submitted to the Engineer including baseline and interim baseline schedules shall include time scaled network diagrams in a layout format requested by the Engineer. The network diagrams submitted to the Engineer shall also be accompanied by our computer-generated mathematical analysis tabular reports for each activity included in the project schedule. The reports (8 1/2" x 11" size) shall include a network diagram report showing the activity columns

only, a predecessor and successor report, a resource report, and a scheduling and leveling calculation report shall include—the following for each activity:

1. Activity number and description;
2. Activity codes;
3. Original, actual and remaining durations;
4. Earliest start date (by calendar date);
5. Earliest finish date (by calendar date);
6. Actual start date (by calendar date);
7. Actual finish date (by calendar date);
8. Latest start date (by calendar date);
9. Latest finish date (by calendar date);
10. Identify activity calendar ID
11. Total Float and Free Float, in work days; and
12. Percentage of activity complete and remaining duration for incomplete activities.;

Network diagrams shall be sorted and grouped in a format requested by the Engineer reflecting the project breakdown per the Caltrans scope breakdown structure codes. They shall be drafted time scaled to show a continuous flow of information from left to right per the project sorting and grouping. E.g., the schedule, from top to bottom, shall be grouped by project milestones, submittals subgrouped by description, and the construction activities subgrouped by the scope breakdown structure. The primary paths of criticality shall be clearly and graphically identified on the networks. The network diagram shall be prepared on E-size sheets (36" x 48"), shall have a title block in the lower right-hand corner, and a timeline on each page. Exceptions to the size of the network sheets and the use of computer graphics to generate the networks shall be subject to the approval of the Engineer.

Schedule network diagrams and the tabular reports shall be submitted to the Engineer for acceptance in the following quantities:

a. 2 sets of the Network Diagrams;
b. 2 copies of the tabular reports (8 1/2" x 11" size); and
c. 3 computer diskettes.

Should the baseline schedule or schedule update, submitted for acceptance, show variances from the requirements of the contract, the Contractor shall make specific mention of the variations in the letter of transmittal, in order that, if accepted, proper adjustments to the project schedule can be made. The Contractor will not be relieved of the responsibility for executing the work in strict accordance with the requirements of the contract documents. In the event of a conflict between the requirements of the contract documents and the information provided or shown on an accepted schedule, the requirements of the contract documents shall take precedence.

Each schedule submitted to the Engineer shall comply with all limits imposed by the contract, with all specified intermediate milestone and completion dates, and with all constraints, restraints or sequences included in the contract. The degree of detail shall include factors including, but not limited to:

1. Physical breakdown of the project;
2. Contract milestones and completion dates, substantial completion dates, constraints, restraints, sequences of work shown in the contract, the planned substantial completion date, and the final completion date;
3. Type of work to be performed, the sequences, and the major subcontractors involved;
4. All purchases, submittals, submittal reviews, manufacture, tests, deliver, and installation activities for all major materials and equipment.
5. Preparation, submittal and approval of shop and working drawings and material samples, showing time, as specified elsewhere, for the Engineer's review. The same time frame shall be allowed for at least one resubmittal on all major submittals so identified in the contract documents;
6. Identification of interfaces and dependencies with preceding, concurrent and follow-on contractors, railroads, and utilities as shown on the plans or specified in the specifications;
7. Identification of each and every utility relocation and interface as a separate activity, including activity description and responsibility coding that identifies the type of utility and the name of the utility company involved.
8. Actual tests, submission of test reports, and approval of test results;
9. All start-up, testing, training, and assistance required under the Contract;
10. Punchlist and final clean-up;
11. Identification of any manpower, material, or equipment restrictions, as well as any activity requiring unusual shift work, such as double shifts, 6-day weeks, specified overtime, or work at times other than regular days or hours; and

12. Identification of each and every ramp closing and opening event as a separate one-day activity, including designation by activity coding and description that it is a north-bound, south-bound, east-bound, west-bound, and entry or exit ramp activity.

Each construction activity shall have a duration of not more than 20 working days, and not less than one working day unless permitted otherwise by the Engineer. All activities in the schedule, with the exception of the first and last activities, shall have a minimum of one predecessor and a minimum of one successor. The baseline schedule shall not attribute negative float to any activity. Float shall not be considered as time for the exclusive use of or benefit of either the State or the Contractor but shall be considered as a jointly owned, expiring resource available to the project and shall not be used to the financial detriment of either party. The Contractor shall not add job inefficiencies or weather days to a project calendar without prior approval by the Engineer. Any accepted schedule, revision or update having an early completion date shall show the time between the early completion date and the current Contract Completion Date as "project float".

The Contractor shall be responsible for assuring that all work sequences are logical and the network shows a coordinated plan for complete performance of the work. Failure of the Contractor to include any element of work required for the performance of the contract in the network shall not relieve the Contractor from completing all work within the time limit specified for completion of the contract. If the Contractor fails to define any element of work, activity or logic, and the omission or error is discovered by either the Contractor or the Engineer, it shall be corrected by the Contractor at the next monthly update or revision of the schedule.

Weekly Schedule Meetings – The Engineer and the Contractor shall hold weekly scheduling meetings to discuss the near term schedule activities, to address any long-term schedule issues, and to discuss any relevant technical issues. The Contractor shall develop a rolling 3-week schedule identifying the current week and a 2-week look ahead. It shall provide sufficient detail to address all activities to be performed and to identify issues requiring engineering action or input. Also, the Engineer shall maintain a critical item list identifying each issue, the project impact, the responsible party, and a scheduled resolution date. The list shall be developed with input from the Contractor and shall prioritize each issue in order to mitigate any schedule or cost impact to the project.

Monthly Update Schedules - The Contractor shall submit a Monthly Update Schedule to the Engineer once in each month. The proposed update schedule prepared by the Contractor shall include all information available as of the 20th calendar day of the month, or other date as established by the Engineer. A detailed list of all proposed schedule changes such as logic, duration, lead/lag, forecast completion date, additions and deletions shall be submitted with the update.

The monthly update schedule submitted to the Engineer shall be accompanied by a Schedule Narrative Report. The Schedule Narrative Report shall describe the physical progress during the report period, plans for continuing the work during the forthcoming report period, actions planned to correct any negative float, and an explanation of potential delays or problems and their estimated impact on performance, milestone completion dates, forecast completion date, and the overall project completion date. In addition, alternatives for possible schedule recovery to mitigate any potential delay or cost increases shall be included for consideration by the Engineer. The report shall follow the outline set forth below:

Contractor's Schedule Narrative Report Outline:

1. Contractor's Transmittal Letter
2. Work completed during the period
3. Description of the current critical path
4. Description of problem areas
5. Current and anticipated delays

    a. Cause of the delay
    b. Corrective action and schedule adjustments to correct the delay
    c. Impact of the delay on other activities, milestones, and completion dates

6. Changes in construction sequences
7. Pending items and status thereof

    a. Permits
    b. Change Orders
    c. Time Extensions
    d. Non-Compliance Notices

8. Contract completion date(s) status

   a. Ahead of schedule and number of days
   b. Behind schedule and number of days

9. Include updated Network Diagram and Reports

The Contractor shall provide to the Engineer a 31/2" electronic disk of the schedule, together with printed copies of the network diagrams and tabular reports described under "Project Schedule Reports", and the Schedule Narrative Report.

The monthly update of the schedule shall be for the period from the last update to the current cut-off date, and for the remainder of the project. The current period's activities shall be reported as they actually took place and designated as actually complete, if actually completed, in the schedule updates.

Portions of the network diagram on which all activities are complete need not be reprinted and submitted in subsequent updates. However, the electronic disk file of the submitted schedule and the related reports shall constitute a clear record of progress of the work from award of contract to final completion.

The Contractor will be permitted to show a forecast completion date on the schedule updates and revisions. The Engineer may use the updates and revisions, and other information available, in evaluating the effect of changes, delays, or time savings on the critical path and the accepted schedule current at the time to determine if there is an applicable adjustment of time, if any, to any target date or completion date due to the changes, delays, or time savings.

On a date determined by the Engineer, the Contractor shall meet with the Engineer to review the monthly schedule update. At the monthly progress meeting, the Contractor and the Engineer will review the updated schedule and will discuss the content of the Narrative Report. The Engineer shall be allowed 15 days after the meeting to review and accept or reject the update schedule submitted. Rejected schedules shall be resubmitted to the Engineer within 10 days, at which time a new 7-day review period by the Engineer will begin. All efforts shall be made between the Engineer and the Contractor to complete the review and the approval process prior to the next update schedule cutoff date. To expedite the process a second meeting between the Engineer and the Contractor shall be held.

Schedule Revisions - If the Contractor desires to make a change to the accepted schedule, the Contractor shall request permission from the Engineer in writing, stating the reasons for the change, and proposed revisions to activities, logic and duration. The Contractor shall submit for acceptance an analysis showing the effect of the revisions on the entire project. The analysis shall include:

1. An updated schedule not including the revisions. The schedule shall have a data date just prior to implementing the proposed revisions and include a project completion date;
2. A revised schedule that includes the proposed revisions. The schedule shall have the same data date as the updated schedule and include a project completion date;
3. A narrative explanation of the revisions and their impact to the schedule; and
4. Computer files of the updated and revised schedules.

The Engineer will provide a response within 10 days. No revision to the accepted baseline schedule or the schedule updates shall be made without the prior written approval of the Engineer.

The Engineer will request the Contractor to submit a proposed revised schedule within 15 days when:

a. there is a significant change in the Contractor's operations that will affect the critical path;
b. the current updated schedule indicates that the contract progress is 30 days or more behind the planned schedule, as determined by the Engineer; or
c. the Engineer determines that an approved or anticipated change will impact the critical path, milestone or completion dates, contract progress, or work by other contractors.

The Engineer shall be allowed 15 days to review and accept or reject a schedule revision. Rejected schedule revisions shall be revised and resubmitted to the Engineer within 15—days, at which time a new 15 day review period by the Engineer

will begin. Only upon approval of a change by the Engineer shall it be reflected in the next schedule update submitted by the Contractor.

Schedule Time Extension Requests - When the Contractor requests a time extension due to contract change orders or delays, the Contractor shall submit to the Engineer a written Time Impact Analysis illustrating the influence of each change or delay on the current contract completion date or milestone completion date, utilizing the current accepted schedule. Each Time Impact Analysis shall include a fragnet demonstrating how the Contractor proposes to incorporate the Change Order or delay into the current schedule. The fragnet shall include the sequence of new and existing activity revisions that are proposed to be added to the accepted baseline project schedule or current schedule in effect at the time the change or delay is encountered, to demonstrate the influence of the delay and the proposed method for incorporating the delay and its impact into the schedule.

Each Time Impact Analysis shall demonstrate the estimated time impact based on the events of delay, the anticipated or actual date of the contract change order work performance, the status of construction at that point in time, and the event time computation of all activities affected by the change or delay. The event times used in the analysis shall be those included in the latest update of the current schedule in effect at the time the change or delay was encountered.

Time extensions will be granted only to the extent that equitable time adjustments for the activity or activities affected exceed the total or remaining float along the critical path of activities at the time of actual delay, or at the time the contract change order work is performed. Float time is not for the exclusive use or benefit of the Engineer or the Contractor, but is an expiring resource available to all parties as needed to meet contract milestones and the contract completion date. Time extensions will not be granted nor will delay damages be paid unless:

a. the delay is beyond the control and without the fault or negligence of the Contractor and its subcontractors or suppliers, at any tier; and,
b. the delay extends the actual performance of the work beyond the applicable current contract completion date and the most recent date predicted for completion of the project on the accepted schedule update current as of the time of the delay or as of the time of issuance of the contract change order.

Time Impact Analyses shall be submitted in triplicate within 15 days after the delay occurs or after issuance of the contract change order.

Approval or rejection of each Time Impact Analysis by the Engineer will be made within 15 days after receipt of the Time Impact Analysis, unless the review is delayed by subsequent meetings and negotiations. A copy of the Time Impact Analysis approved by the Engineer shall be returned to the Contractor and the accepted schedule revisions illustrating the influence of the contract change orders or delays shall be incorporated into the project schedule during the first update after approval.

Final Schedule Update - Within 15 days after the acceptance of the contract by the Director, the Contractor shall submit a final update of the schedule with actual start and actual finish dates for all activities. This schedule submission shall be accompanied by a certification, signed by an officer of the company and the Contractor's Project Manager stating "To the best of my knowledge, the enclosed final update of the project schedule reflects the actual start and completion dates of the activities contained herein."

Equipment and Software - The Contractor shall provide for the State's exclusive possession and use a complete computer system specifically capable of creating, storing, updating and producing CPM schedules. Before delivery and setup of the computer system, the Contractor shall submit to the Engineer for approval a detailed list of all computer hardware and software the Contractor proposes to furnish. The minimum computer system to be furnished shall include the following:

1. Complete computer system, including keyboard, mouse, 17 inch color SVGA monitor (1,024x768 pixels), Intel Pentium 450 MHz micro processor chip, or equivalent, or better;
2. Computer operating system software, compatible with the selected processing unit, for Windows 98 or later, or equivalent;
3. Minimum one hundred twenty-eight (128) megabytes of random access memory (RAM);
4. A 8.0 gigabyte minimum hard disk drive, a 1.44 megabyte 3 l/2 inch floppy disk drive, 32x speed minimum CD-ROM drive, Ethernet card and 56k modem;
5. A color-ink-jet plotter with a minimum 36 megs RAM, capable of 300 dots per inch color, 600 dots per inch monochrome, or equivalent plotter capable of printing fully legible, timescaled charts, and network diagrams, in four colors, with a minimum size of 36 inches by 48 inches (E size) and is compatible with the selected system. All required plotter paper and ink cartridges throughout the contract;

6. CPM software shall be Primavera Project Planner, the latest version for Windows 95, or later; and
7. Schedule Analyzer Pro– a software to compare two different Primavera schedule updates to analyze their similarities and differences. The latest version for Windows 95, or later.

The computer hardware and software furnished shall be compatible with that used by the Contractor for the production of the CPM progress schedule required by the Contract, and shall include original instruction manuals and other documentation normally provided with the software.

The Contractor shall furnish, install, set up, maintain and repair the computer hardware and software ready for use at a location determined by the Engineer. The hardware and software shall be installed and ready for use by the first submission of the baseline schedule. The Contractor shall provide 24 hours of formal training for the Engineer, and three other agents of the department designated by the Engineer, in the use of the hardware and software to include schedule analysis, reporting, and resource and cost allocations. The training shall be performed by an authorized vendor of Project Primavera Project Planner software and shall be completed not more than 30 days after approval of the contract.

All computer hardware and software furnished shall remain the property of the Contractor and shall be removed by the Contractor upon acceptance of the contract when no claims involving contract progress are pending. When claims involving contract progress are pending, computer hardware or software shall not be removed until the final estimate has been submitted to the Contractor.

Payment - Progress schedule (critical path) will be paid for at a lump sum price. The contract lump sum price paid for progress schedule (critical path) shall include full compensation for furnishing all labor, materials (including computer hardware and software), tools, equipment, and incidentals; and for doing all the work involved in preparing, furnishing, updating and revising CPM progress schedules; maintaining and repairing the computer hardware; and training the Engineer in the use of the computer hardware and software; as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Payments for progress schedule (critical path) will be made as follows:

Interim baseline schedule accepted, then 10 percent payment for progress schedule (critical path) will be made.

Baseline schedule accepted, then 10 percent payment for progress schedule (critical path) will be made.

Monthly update schedules accepted, then 75 percent payment for progress schedule (critical path) will be made equally for each update.

Final schedule update accepted, then 5 percent payment for progress schedule (critical path) will be made.

The Department will retain an amount equal to 25 percent of the estimated value of the work performed during the first estimate period in which the Contractor fails to submit an interim baseline, baseline, revised or updated CPM schedule conforming to the requirements of this section, as determined by the Engineer. Thereafter, on subsequent successive estimate periods the percentage the Department will retain will be increased at the rate of 25 percent per estimate period in which acceptable CPM progress schedules have not been submitted to the Engineer. Retention’s for failure to submit acceptable CPM progress schedules shall be additional to all other retention’s provided for in the contract. The retention for failure to submit acceptable CPM progress schedules will be released for payment on the next monthly estimate for partial payment following the date that acceptable CPM progress schedules are submitted to the Engineer.

The adjustment provisions in Section 4-1.03, "Changes," of the Standard Specifications, shall not apply to the item of progress schedule (critical path). Adjustments in compensation for the project schedule will not be made for any increased or decreased work ordered by the Engineer in furnishing project schedules.

CONTRACT NO. 04-043554
REVISED PER ADDENDUM NO. 1 DATED JUNE 21, 1999

Preliminary Site Investigation

SUMMARY TABLE

SEISMIC RETROFIT OF THE WEST END OF THE SAN FRANCISCO - OAKLAND BAY BRIDGE

Zone (bgs)	Sample Depth (bgs)	Sample ID	Lead Concentration (mg/kg)	Classification
Pier W1				
0 to 7.6 m (0 to 25 feet)	5 feet	B1-5	15	HAZARDOUS
		B2-5	48	
		B3-5	560 {<0.2}	
		B4-5	160 (7.9)	
		B5-5	55 (11)	
		B6-5	190 (<0.2)	
	10 feet	B1-10	23	
		B2-10	140 (8.1)	
		B3-10	190 (13)	
		B4-10	640 (7.5) {3.0}	
		B5-10	1000 {<0.2}	
		B6-10	560 (23)	
	15 feet	B1-15	19	
		B2-15	150 (15)	
		B3-15	230 (33)	
		B4-15	62 (1.1)	
		B5-15	1400	
		B6-15	75 (1.9)	
	20 feet	B1-20	34	
		B2-20	810 {0.6}	
		B3-20	430	
		B5-20	24	
		B6-20	410 (14)	
	25 feet	B1-25	22	
		B2-25	6.1	
		B3-25	15	
		B4-25	23	
		B5-25	71 (<0.2)	
		B6-25	110	
7.6 to 12.8+ m (25 to 42+ feet)	30 feet	B1-30	6.7	NON-HAZARDOUS
		B2-30	6.7	
		B3-30	7.8	
		B4-30	12	
		B5-30	8.1	
		B6-30	15	
	35 feet	B2-35	38	
		B6-35	12	
	40 feet	B2-40	34	
		B6-40	4.6	
	42 feet	B2-42	21	
		B6-42	5.1	

Preliminary Site Investigation

SUMMARY TABLE

SEISMIC RETROFIT OF THE WEST END OF THE SAN FRANCISCO - OAKLAND BAY BRIDGE

Zone (bgs)	Sample Depth (bgs)	Sample ID	Lead Concentration (mg/kg)	Classification
Bent A				
0 to 6.1 m (0 to 20 feet)	5 feet	B11-5	79 (8.2)	HAZARDOUS
		B12-5	170 (5.1)	
		B13-5	98 (4.1)	
		B14-5	8	
	10 feet	B11-10	1100	
		B12-10	36	
		B13-10	94 (4.6)	
		B14-10	32	
	15 feet	B11-15	170 (2.1)	
		B12-15	52 (5.9)	
		B13-15	340	
		B14-15	440 (15)	
	20 feet	B11-20	79 (4.5)	
		B12-20	33	
		B13-20	35	
		B14-20	12	
6.1 to 10.7 m (20 to 35 feet)	25 feet	B11-25	1	NON-HAZARDOUS
		B12-25	1	
		B13-25	34	
		B14-25	3	
	30 feet	B11-30	20	
		B12-30	1	
		B13-30	2	
		B14-30	2.7	
	35 feet	B12-35	3	
		B13-35	1	
		B14-35	<1.0	

REVISED PER ADDENDUM NO. 1 DATED JUNE 21, 1999

Preliminary Site Investigation

SUMMARY TABLE

SEISMIC RETROFIT OF THE WEST END OF THE SAN FRANCISCO - OAKLAND BAY BRIDGE

Zone (bgs)	Sample Depth (bgs)	Sample ID	Lead Concentration (mg/kg)	Classification
Bent B				
0 to 4.6 m (0 to 15 feet)	5 feet	B7-5	64 (12)	HAZARDOUS
		B8-5	23,000	
		B9-5	75 (4.2)	
		B10-5	17	
	10 feet	B7-10	5	
		B8-10	48	
		B9-10	97 (3.7)	
		B10-10	220 (10)	
	15 feet	B7-15	5.4	
		B8-15	37	
		B9-15	19	
		B10-15	59 (<0.2)	
4.6 to 10.6 m (15 to 35+ feet)	20 feet	B7-20	51 (0.9)	NON-HAZARDOUS
		B8-20	8.4	
		B9-20	4.5	
		B10-20	89 (0.5)	
	25 feet	B7-25	71 (1.8)	
		B8-25	100 (4.7)	
		B9-25	2.8	
		B10-25	1.1	
	30 feet	B7-30	1.8	
		B8-30	3	
		B9-30	3.2	
		B10-30	1.9	
	35 feet	B7-35	<1.0	
		B8-35	4.3	
		B9-35	5.6	
		B10-35	3	

Preliminary Site Investigation

SUMMARY TABLE

SEISMIC RETROFIT OF THE WEST END OF THE SAN FRANCISCO - OAKLAND BAY BRIDGE

Zone (bgs)	Sample Depth (bgs)	Sample ID	Lead Concentration (mg/kg)	Classification
434 Main Street				
0 to 4.6 m (0 to 15 feet)	1 foot	SB6-1	260 (70) {1.2}	HAZARDOUS
	1.5 feet	SB5-1.5	170 (17) {1.1}	
		SB10-1.5	450 (46) {4.4}	
	2.5 feet	SB7-2.5	590 (55) {0.56}	
		SB9-2.5	590 (47) {2.2}	
		SB11-2.5	16	
	3 feet	SB2-3	250	
	3.5 feet	SB5-3.5	81 (6.2)	
		SB8-3.5	210 (26) {0.3}	
	4 feet	SB3-4	270	
		SB6-4	280 (43) {1.3}	
		SB10-4	160 (16) {0.55}	
	4.5 feet	SB1-4.5	120	
		SB4-4.5	700	
	5 feet	SB6-5	580 (130) {2.1}	
	5.5 feet	SB5-5.5	230 (14) {1.7}	
		SB7-5.5	110 (17) {0.77}	
		SB8-5.5	63 (4)	
	6 feet	SB11-6	12	
	6.5 feet	SB8-6.5	370 (27) {1.1}	
	7 feet	SB7-7	79 (21)	
	8 feet	SB8-8	170 (5.9) {ND}	
		SB10-8	140 (13) {0.66}	
	8.5 feet	SB5-8.5	980 (4.5) {0.11}	
		SB6-8.5	53 (23)	
	9 feet	SB7-9	16	
	10 feet	SB11-10	13	
	11 feet	SB10-11	250 (13) {3.1}	
	13 feet	SB11-13	11	
	15 feet	SB10-15	120 (2.2) {12}	

Notes:
<0.01 = not detected at or above the laboratory detection limits
ND = Not Detected at or above the laboratory detection limits
(3.3) = Soluble concentration after a waste extraction test (WET), presented in milligrams per liter (mg/l)
{3.3} = Soluble concentration after a toxicity characteristic leaching procedure (TCLP), presented in mg/l.
Hazardous: Concentration classified as hazardous waste under California Code of Regulations (Title 22)

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